

# COMPUTER MUSIC WITH OR WITHOUT THE COMPUTER !

## EQUALLY TEMPERED DIGITAL TO ANALOG CONVERTER

Unlike more conventional R-2R ladder type digital to analog converters, the PAIA 8780 kit is based on a multiplying principle that allows the module to generate the exact exponential stair-step function required to make even the simplest linear response oscillators and filters produce equally tempered musical intervals. The 8780 uses only six bits of data to generate over 5 octaves of control voltage. In an 8 bit system, the remaining 2 bits are ordinarily reserved for trigger flags, but may be used to extend the range of the converter or provide micro-tonal tunings.

The module is physically and electrically compatible with the complete line of PAIA music synthesizer modules and is easily interfaced to any micro-processor with or without hand-shaking logic.

#8780 D/A CONVERTER Kit ..\$34.95 (plus \$1.00 postage)



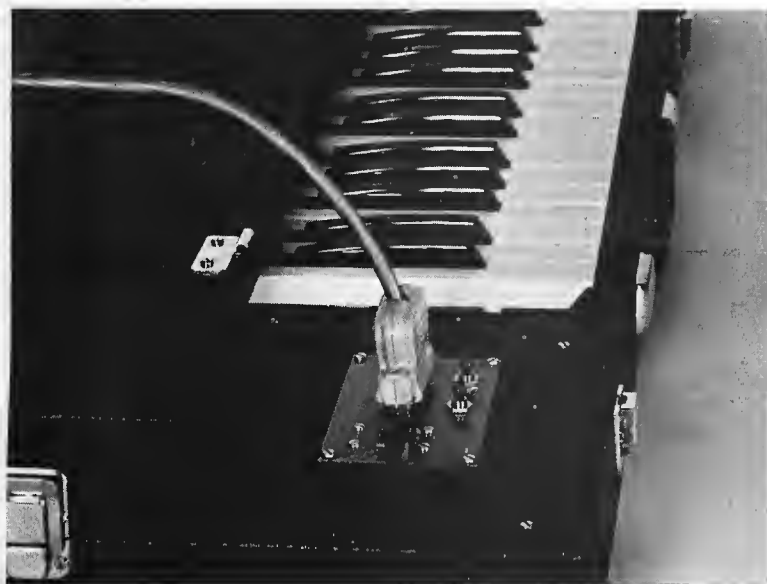
## THE PAIA HIGH LEVEL LANGUAGE FOR COMPUTER MUSIC DATA ENTRY (We call it a keyboard)

An n key roll-over scanning matrix encoder tied to a 37 note AGO keyboard provides 6 bits of data and both STROBE and  $\overline{\text{STROBE}}$  control outputs. Input control lines to the encoder include  $\overline{\text{SCAN}}$  (starts and stops encoder clock), RESET, START and RANDOM making the keyboard universally applicable to all computer/processors from the very largest to the very smallest.

NO COMPUTER? The encoded keyboard can be directly interfaced to the PAIA 8780 Equally Tempered Digital to Analog converter to provide an infinite hold Sample and Hold device. The keyboard contains its own power supply for stand-alone applications.

Housed in a trim and sturdy vinyl covered road case, the kit consists of all parts including keyboard, power supply and detailed assembly instructions; software overview for computer applications and detailed instructions for Digital Sample and Hold.

#8782 ENCODED KEYBOARD ... \$109.95 ..... 20 lbs shipped freight collect



## WITH A COMPUTER .....

Both the 8780 D/A and the 8782 Encoded Keyboard easily interface to any processor providing capabilities and control never before possible with music synthesizers.



## WITHOUT A COMPUTER .....

An infinite hold, DIGITAL Sample and Hold and the heart of an entire system of modules that will be introduced over the next few months including: Memories, Polytonic output modules and others.



# MORE NEW IDEAS

## EK-3 KEYBOARD ENCODER EXPERIMENTER'S KIT

Up-date PAIA (or other) keyboards to new digital format. Consists of encoder circuit board and all parts required to modify your present keyboard for use with computers and/or the 8780 D/A. Off-print instructions from "COMPUTER MUSIC WITHOUT THE COMPUTER", Polyphony 4/76.

#EK-3 KBD Encoder Experimenter's Kit ..... \$14.95  
plus \$1.00 postage

NOTE: future devices in this series include a polytonic expansion system (available 5/15/77) and digital memory/sequencer (available 6/30/77) WATCH FOR THEM.

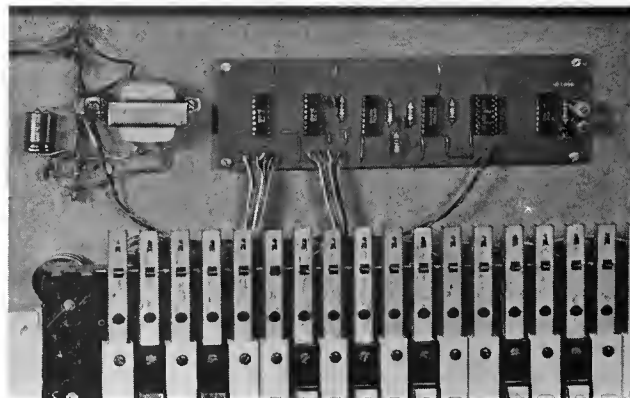


## ELECTRO-LARYNX/PYGMY RETRO-FIT

Convert your Pygmy Amp to produce the popular new "Talking Guitar" effects.

The modification kit includes a replacement speaker bezel which concentrates the sound from the speaker and emits this higher pressure signal from a small hole. The sound pressure is fed through a 6 ft length of tubing to your mouth for formant processing.

Electro-Larynx Retro-Fit ..... \$5.00 ... 50¢ postage



## COMPUTER TECHNOLOGY APPLIED ..... ....IN A SELF-CONTAINED PROGRAMMABLE DRUM SET

While most electronic rhythm units offer only a limited choice of pre-determined rhythm patterns, the PAIA Programmable Drum Set allows the user to tailor pattern, time signature and drum sounds to each application. Among the unique features provided by the unit are touch sensitive electronic controls and the provision for an independently structured bridge rhythm.

Battery powered, the drum set includes a "memory save" switch which provides a lowered "keep-alive" voltage to the drum set's 256 byte memory.

#3750 PROGRAMMABLE DRUM SET Kit ..... \$79.95  
(plus \$3.00 shipping & insurance)



# from the innovators

**PAIA**  
ELECTRONICS

1020 W. WILSHIRE BLVD.  
OKLAHOMA CITY, OK 73116

## A NEW DEMO TAPE

Vinyl sound sheets - like our old demo record - are nice. But you have to buy so many of them that they get incredibly out of date before you use them all up. We're switching to demo cassettes (more expensive - but also more current). The first one is available NOW and is a collection of the telephone demo classics plus a new cut featuring the PHLANGER and a short demo of the new computer music devices.

Demo Cassette ..... \$3.00 ..... plus 50¢ postage